

MENINGOCOCCAL MENINGITIS OUTBREAK

8. Foster MT Jr, Sanders E, Ginter M: Epidemiology of sulfonamide-resistant meningococcal infections in a civilian population. *Am J Epidemiol* 93:346-353, May 1971
9. Kaiser AB, Hennekens CH, Saslaw MS, et al: Seroepidemiology and chemoprophylaxis of disease due to sulfonamide-resistant *Neisseria meningitidis* in a civilian population. *J Infect Dis* 130: 217-224, Sep 1974
10. Munford RS, Taunay A de E, Souza De Morais J, et al: Spread of meningococcal infection within households. *Lancet* 1:1275-1278, Jun 1974
11. Souza De Morais J, Munford RS, Risi JB, et al: Epidemic disease due to serogroup C *Neisseria meningitidis* in São Paulo, Brazil. *J Infect Dis* 129:568-571, May 1974
12. Norton JF: Meningococcus meningitis in Detroit: 1928-1929—V. Secondary cases. *J Prev Med* 5:365-367, Sep 1931
13. Levy GJ: Meningococcus meningitis: A study of the Memphis outbreak in 1930. *South Med J* 24:232-238, Mar 1931
14. Lee WW: Epidemic meningitis in Indianapolis, 1929-1930. *J Prev Med* 5:203-209, May 1931
15. Leedom JM, Ivlev D, Mathies AW, Jr, et al: The problem of sulfadiazine-resistant meningococci. *Antimicrob Agents Chemo* 6:281-292, 1966
16. Hoynes A, McEnery ET: Multiple cases of epidemic meningitis in the same family. *Arch Pediatr* 46:699-702, Nov 1929
17. Center for Disease Control, Morbidity and Mortality Weekly Report 24:455, 1976
18. Weidmer CE, Dunkel TB, Pettyjohn FS, et al: Effectiveness of rifampin in eradicating meningococcal carrier state in a relatively closed population: Emergence of resistant strains. *J Infect Dis* 124:172-178, Aug 1971
19. Guttler RB, Counts GW, Avent CK, et al: Effort of rifampin and minocycline on meningococcal carrier rates. *J Infect Dis* 124:199-205, Aug 1971
20. Eickhoff TC: In-vitro and in-vivo studies of resistance to rifampin in meningococci. *J Infect Dis* 123:414-420, Apr 1971
21. Khuri-Bulos N: Meningococcal meningitis following rifampin prophylaxis. *Am J Dis Child* 126:689-691, Nov 1973
22. Williams DN, Laughlin LW, Lee Y-H: Minocycline: Possible vestibular side-effects. *Lancet* 2:744-746, Sep 1974
23. Center for Disease Control, Morbidity and Mortality Weekly Report 25:31, 1976
24. Devine LF, Pollard RB, Krumpke PE, et al: Field trial of the efficacy of a previously proposed regimen using minocycline and rifampin sequentially for the elimination of meningococci from healthy carriers. *Am J Epidemiol* 97:394-401, Jun 1973
25. Munford RS, Sussuarana De Vasconcelos ZJ, Phillips CJ, et al: Eradication of carriage of *Neisseria meningitidis* in families: A study in Brazil. *J Infect Dis* 129:644-649, Jun 1974
26. Artenstein MS: Prophylaxis for meningococcal disease. *JAMA* 231:1035-1037, Mar 1975
27. Center for Disease Control, Morbidity and Mortality Weekly Report 24:381-382, Nov 1975

Esophageal Pain Misdiagnosed as Angina Pectoris

A PATIENT may say that he or she has pain in the chest and this pain may be described as similar to the pain of angina pectoris. . . . Physicians may do a great disservice to their patients if they do not clearly define the nature of chest pain. Angina pectoris is, of course, typically caused by myocardial ischemia and is a deep, frightening, sometimes crushing type of pain in the chest which may radiate to the jaw, to the shoulders or down the arm. Esophageal pain is extremely similar in its descriptions and . . . in its radiation. The only way we can really distinguish the one from the other is by noting the associations. The situation arising from the esophagus and causing symptoms is usually associated, at some point or other in the history, with dysphagia. The pain of heart disease is usually, but not always, associated with activity; it may be associated with eating. . . . With these associations we can distinguish one from the other and it is extremely important to do so. It would be a great disservice if a patient has myocardial ischemia and we treat it lightly. . . . We do a patient just as great a disservice if esophageal spasm is the problem and we treat it too seriously by calling it angina pectoris. There may be as many lives being ruined in the social and personal sense by having a condition misdiagnosed as angina pectoris as there are lives threatened by a failure to diagnose angina pectoris.

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